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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,952	09/10/2003	Jason Griffin	555255012482	3520

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EXAMINER

EKONG, EMEM

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/658,952	GRIFFIN ET AL.	
	Examiner	Art Unit	
	EMEM EKONG	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/02/04 & 02/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11, 13, 20-22, 25 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6541715 B2 to Philip Swanson (Swanson).

Regarding claim 1, Swanson discloses a mobile device (i.e. hand-held computers, word processors, mobile telephones and other electronics devices) having a telephony mode and a text-entry mode, comprising (see fig.1, fig. 2, col. 1 lines 4-6 and col. 2 lines 5-7):

a dual-mode keypad (alphanumeric keyboard) including a plurality of dual-mode keys (multi-functional key members) that each include an associated telephony character and at least one associated text-entry character (alphanumeric character) (see fig.1, fig. 2 , col. 2 lines 56-59, and col. 3 line 5);

the dual-mode keys (multi-functional key member) including one or more toggle keys, each toggle key having a plurality of associated text-entry characters and one associated telephony character (fig. 1, fig. 2, and col. 2 lines 55-65);

when the mobile device is in text-entry mode, the dual-mode keys being operable to input the associated text-entry characters, the toggle keys each being operable to input a first text-entry character when a first portion of the toggle key is pressed and to input a second text-entry character when a second portion of the toggle key is pressed (alphanumeric character) (figures 1, 2,3,4 and col. 3 lines 1-15);

when the mobile device is in telephony mode, the dual-mode keys being operable to input the associated telephony characters, the toggle keys each being operable to input one of the associated telephony characters when any portion of the toggle key is pressed (figure 1, figure 2, col. 2 line 3-col.3 line15).

Regarding claim 2, Swanson discloses the mobile device of claim 1, wherein at least one of the toggle keys are operable to input a third text-entry character when a third portion of the toggle key is pressed (see figure 1, figure 2, and col. 3 lines 5-10).

Regarding claim 3, Swanson discloses the mobile device of claim 1, wherein at least one of the toggle keys are operable to input a fourth text-entry character when a fourth portion of the toggle key is pressed (see figure 1, figure 2, and col. 3 lines 5-10).

Regarding claim 4, Swanson discloses the mobile device of claim 1, wherein each toggle key includes a first switch that is engaged when the first portion of the toggle key is pressed and a second switch that is engaged when the second portion of the toggle key is pressed (see figure 3, figure 4, and col. 3 lines 17-50).

Regarding claim 5, Swanson discloses the mobile device of claim 4, wherein when the mobile device is in the text-entry mode, the first text-entry character is input by engaging the first switch and the second text-entry character is input by engaging the second switch (see figure 3, figure 4, and col. 3 lines 29-50).

Regarding claim 6, Swanson discloses the mobile device of claim 4, wherein when the mobile device is in the telephony mode, the telephony character is input by engaging either the first switch or the second switch (telephony character is read as a combination of two or more of the switching means 21-24) (col.2 lines 52-65).

Regarding claim 7, Swanson discloses the mobile device of claim 1, wherein each toggle key includes a first switch that is engaged when the first portion of the toggle key is pressed, a second switch that is engaged when the second portion of the toggle key is pressed, and a third switch that is engaged when any portion of the toggle key is pressed (see figure 3, figure 4, and col. 3 lines 17-50).

Regarding claim 8, Swanson discloses the mobile device of claim 7, wherein when the mobile device is in the text-entry mode, the first text-entry character is input by engaging the first switch and the second text-entry character is input by engaging the second switch (see figure 3, figure 4, and col. 3 lines 29-50).

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Regarding claim 9, Swanson discloses the mobile device of claim 7, wherein when the mobile device is in the telephony mode, the telephony character is input by engaging the third switch (3rd switch is read as a combination of two or more of the switching means 21-24) (col. 3 lines 52-64).

Regarding claim 10, Swanson discloses the mobile device of claim 7, wherein the third switch provides a tactile response when any portion of the toggle key is pressed (see figures 3, 4, and col. 3 lines 52-64).

Regarding claim 11, Swanson discloses the mobile device of claim 10, wherein when the mobile device is in the telephony mode, the telephony character is input by engaging either the first switch or the second switch (telephony character is read as a combination of two or more of the switching means 21-24) (col.3 lines 52-65).

Regarding claim 13, Swanson discloses the mobile device of claim 1, wherein the telephony characters are arranged in a telephone-style keyboard pattern (see figures 1 and 2).

Regarding claim 20, Swanson discloses a dual-mode keypad (alphanumeric keyboard) comprising:

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a plurality of dual-mode keys (multi-functional key member) that each include an associated telephony character and at least one associated text-entry character (see figures 1, 2, col. 2 lines 56-59 and col. 3 line 5);

the dual-mode keys (multi-functional key member) including one or more toggle keys, each toggle key having a plurality of associated text-entry characters and one associated telephony character (figures 1, 2 and col. 2 lines 55-65);

the dual-mode keypad being operable in telephony mode and text-entry mode (figures 1 and 2);

when the dual-mode keypad is operating in text-entry mode, the dual-mode keys being operable to input the associated text-entry characters, the toggle keys each being operable to input a first text-entry character when a first portion of the toggle key is pressed and to input a second text-entry character when a second portion of the toggle key is pressed (see figure 1, 2 and col. 3 lines 1-15);

when the dual-mode keypad is operating in telephony mode, the dual-mode keys being operable to input the associated telephony characters (numeric value), the toggle keys each being operable to input one of the associated telephony characters when any portion of the toggle key is pressed (see figure 1, figure 2, col. 2 line 3-col. 3 line 15).

Regarding claim 21, Swanson discloses the dual-mode keypad of claim 20, wherein at least one of the toggle keys are operable to input a third text-entry character when a third portion of the toggle key is pressed (figure 1, figure 2, and col. 3 lines 5-

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10).

Regarding claim 22, Swanson discloses the dual-mode keypad of claim 20, wherein at least one of the toggle keys are operable to input a fourth text-entry character when a fourth portion of the toggle key is pressed (see figure 1, figure 2, and col. 3 lines 5-10).

Regarding claim 25, Swanson discloses the dual-mode keypad of claim 20, wherein the telephony characters are arranged in a telephony-style pattern (see figures 1 and 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12, 14-19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson in view of U.S. Publication No. 20050053225 A1 to Jason T. Griffin (Griffin).

Regarding claims 12, 14-16, 18, and 19, Swanson discloses mobile device of claim 1, however Swanson fails to disclose wherein text-entry characters are arranged in a QWERTY-style keyboard pattern,

and wherein the dual-mode keypad also includes one or more functional keys that are operable in both the telephony mode and the text-entry mode;

the dual-mode keypad also includes one or more functional keys that are operable in one of the telephony mode or the text-entry mode;

further comprising: a processing subsystem, a memory subsystem, and a communication subsystem, the processing subsystem coupled to the memory subsystem and communication subsystem and operable to store and retrieve data in the memory subsystem, to execute instructions stored in the memory subsystem, and to cause the communication subsystem to transmit and receive data over a communication network;

the dual-mode keypad also includes one or more single-mode keys each with an associated character and operable to input the associated character when the mobile device is in one of the telephony mode or the text-entry mode;

the dual-mode keypad also includes one or more single-mode keys each with two associated text-entry characters, wherein a first text-entry character is input when a first portion of the single-mode key is pressed and a second text-entry character is input when a second portion of the single-mode key is pressed.

In a similar field of endeavor Griffin discloses handheld electronic device with keyboard. Griffin further discloses mobile device (handheld electronic device) wherein text-entry characters are arranged in a QWERTY-style keyboard pattern (abstract, and paragraph 0004),

and wherein the dual-mode keypad (par. 0005) also includes one or more functional keys that are operable in both the telephony mode and the text-entry mode (see figure 2 and paragraphs 0052-0054);

the dual-mode keypad also includes one or more functional keys that are operable in one of the telephony mode or the text-entry mode (paragraph 0053);

further comprising: a processing subsystem, a memory subsystem, and a communication subsystem, the processing subsystem coupled to the memory subsystem and communication subsystem and operable to store and retrieve data in the memory subsystem, to execute instructions stored in the memory subsystem, and to cause the communication subsystem to transmit and receive data over a communication network (see figure 1 and paragraphs 0030-0033);

the dual-mode keypad also includes one or more single-mode keys each with an associated character and operable to input the associated character when the mobile device is in one of the telephony mode or the text-entry mode (see figures 6-9, 11 and paragraphs 0062 and 0063).

the dual-mode keypad also includes one or more single-mode keys each with two associated text-entry characters, wherein a first text-entry character is input when a first portion of the single-mode key is pressed and a second text-entry character is input when a second portion of the single-mode key is pressed (figures 6-9, and 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mobile device of Swanson with the teachings of Griffin for the purpose of making the mobile device in a familiar pattern but also making

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it small, suitable and easy to handle alphanumeric information in different kinds of user environments.

Regarding claim 17, Swanson discloses the mobile device of claim 16, however fails to disclose further comprising: executable predictive text program code stored in the memory subsystem and comprising instructions operable to cause the mobile device to predict a complete word or phrase from one or more text-entry characters input to the mobile device when the mobile device is in text-entry mode.

Griffin discloses mobile device further comprising: executable predictive text program code stored in the memory subsystem and comprising instructions operable to cause the mobile device to predict a complete word or phrase from one or more text-entry characters input to the mobile device when the mobile device is in text-entry mode (figure 1, paragraphs 0032 and 0033).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mobile device of Swanson with the teaching of Griffin for the purpose that the mobile device stores text for future use.

Regarding claims 23, and 24, Swanson discloses the dual-mode keypad of claim 20. However fails to specifically disclose wherein the text-entry characters are arranged in a QWERTY-style keyboard pattern;

the text-entry characters are arranged in a keyboard pattern selected from a group of keyboard patterns consisting of a DVORAK style keyboard pattern, an

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alphabetic style keyboard pattern, a QWERTZ style keyboard pattern, an AZERTY style keyboard pattern and combinations thereof.

Griffin discloses the dual-mode keypad wherein the text-entry characters are arranged in a QWERTY-style keyboard pattern (abstract and paragraph 0003); the text-entry characters are arranged in a keyboard pattern selected from a group of keyboard patterns consisting of a DVORAK style keyboard pattern, an alphabetic style keyboard pattern, a QWERTZ style keyboard pattern, an AZERTY style keyboard pattern and combinations thereof.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Swanson with the teachings of Griffin for the purpose that the mobile device keyboard has a traditional pattern.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to mobile device:

U.S. Pub. No. 20040227733 A1 to Steven H. Fyke (Fyke et al)

U.S. Pub. No. 20030020692 A1 to Jason T. Griffin (Griffin et al.)

U.S. Pub. No. 20020055350 A1 to Ash Gupte (Gupte et al)

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The following patents are cited to further show the state of the art with respect to keypad:

U.S. Pat. No. 6681002 B2 to Liang Chang (Chang)

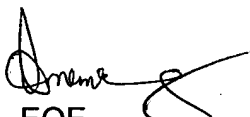
U.S. Pat. No. 5861823 to Gary J. Strauch (Strauch et al.)


U.S. Pat. No. 5852414 to Seymour H. Yu (Yu et al).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM EKONG whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH FEILD can be reached on 571 272 4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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6/22/05